



Winston H. Hickox
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

1001 I Street • P.O. Box 2815 • Sacramento, California 95812 • www.arb.ca.gov



Gray Davis
Governor

Dear Sir or Madam:

The Air Resources Board (ARB or Board) staff invite you to participate in a training session on using the ARB's on-road motor vehicle emissions model (EMFAC). Enclosure 1 presents the session agenda. The ARB is conducting this training at the request of various users, both internal and external to the ARB. Enclosure 2 presents background information on the EMFAC Model. The EMFAC Model and User's Guide may be downloaded from <http://www.arb.ca.gov/msei/msei.htm>.

The training will be conducted by Mr. Dilip Patel, Staff Air Pollution Specialist, Analysis Section. Training sessions will be held in both northern and southern California as noted below:

Date: November 12, 2003
Time: 10:00 a.m. – 3:00 p.m.
Location: Conference Room 100, First Floor
1927 13th Street (13th and T Streets)
Sacramento, California 95814

Date: November 13, 2003
Time: 10:00 a.m. – 3:00 p.m.
Location: Annex 4 Conference Room
9528 Telstar Avenue
El Monte, California 91731

For Sacramento, public parking is available on "R" Street between 15th and 16th streets. For El Monte, public parking is available along Telstar Avenue and in designated parking spaces.

The meeting facilities are accessible to persons with disabilities. If accommodations are needed, please contact Mr. Jeff Long by November 5, 2003. Persons with hearing or special impairments can contact us by using our Telephone Device for the Deaf (TDD) at (916) 324-9531, or (800) 700-8326 for TDD calls from outside the Sacramento area.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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Sir/Madam
October 28, 2003
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If you have any questions, or would like to be added to our e-mail list to be informed of periodic updates, please e-mail Mr. Long, at jlong@arb.ca.gov.

Sincerely,

/s/

Robert D. Fletcher, Chief
Planning and Technical Support Division

Enclosures

cc: Mr. Jeff Long, Manager
Mobile Source Analysis Branch

Mr. Dilip Patel
Mobile Source Analysis Branch

Enclosure 1

California Environmental Protection Agency Air Resources Board

Training On EMFAC2002 Agenda

Date:	November 12, 2003	Date:	November 13, 2003
Time:	10:00 a.m. – 3:00 p.m.	Time:	10:00 a.m. – 3:00 p.m.
Location:	Conference Room 100, First Floor 1927 13 th Street (13 th and T Streets) Sacramento, California 95814	Location:	Annex 4 Conference Room 9528 Telstar Avenue El Monte, California 91731

10:00 a.m. Welcome/Introductions

10:15 a.m.-12:00p.m. Model Overview

- Introduction to EMFAC2002
- Pollutants and Processes
- Overview of Terminology
- What is a Scenario
- Running EMFAC2002
- Overview of Burden Mode
- Overview of Emfac Mode
- Overview of Calimfac Mode
- Editing Fundamental Data

12:00 to 1:00 p.m. Lunch Break

1:00-2:00 p.m. Presentation of Examples

- Inspection and Maintenance (area adopts enhanced program, state rescinds I&M exemptions for older vehicles)
- Changing VMT estimates. (CARB's guidance on VMT)
- Changing vehicle trip estimates.
- Changing Speed Distributions. COG has revised its estimates of how much travel is occurring at various speeds.
- Effect on Emission rates from changing speed.
- Changing Implementation schedules
What is the impact on 2010 statewide inventory if we changed ZEV sales from 10% to 4% beginning 2003 calendar year.
- Lifetime emissions from a ULEV

2:30-3:00 p.m. Future Modifications

- Review features that may be added to EMFAC
- User's Forum - solicit ideas for other features that should be added to EMFAC

Enclosure 2

Background Information on the On-Road Motor Vehicle Emissions Inventory

What is the EMFAC model?

The main function of the Air Resources Board's (ARB) EMFAC Model is to generate emission factor information for the numerous vehicle classes, such as heavy-duty trucks and passenger cars. The EMFAC Model also provides for the integration of vehicle activity data provided by the regional transportation agencies. The two modules together allow for the generation of the State's on-road motor vehicle emissions inventory.

The EMFAC Model can provide emission estimates for the State as a whole and individually for each county, air district, or air basin. The EMFAC Model also provides emissions for each type of vehicle (cars, trucks, motorcycles, motor homes, etc.). In addition, the EMFAC Model can provide emission rates for various conditions (different temperatures, humidities, and speeds) to allow for the evaluation of special scenarios such as day-specific emissions inventories or assessment of control measure effectiveness.

How is the EMFAC Model used?

The EMFAC Model is used for a variety of purposes. First, output from the EMFAC Model is used to create California's annual statewide emissions inventory. Because on-road motor vehicle emissions are a significant part of California's total emissions, the output from the EMFAC model provides an important part of the inventory.

The emission inventories created with the EMFAC Model are also part of the basis of State Implementation Plans (SIPs), i.e., the federally enforceable plans showing how each region of the State will reduce emissions in order to reach attainment with health-based air quality standards. The on-road motor vehicle emissions inventories in SIPs set on-road motor vehicle emission budgets for purposes of meeting federal transportation conformity requirements. The federal Clean Air Act requires that regions' transportation plans conform to the SIPs, i.e., that emissions from the transportation system do not exceed on-road motor vehicle emission budgets set in the SIPs. Transportation agencies use output from the EMFAC Model to make conformity determinations.

Finally, the EMFAC Model is also used to evaluate the effectiveness of various motor vehicle control programs, as well as to show how California motor vehicle emissions have changed over time and are projected to change in the future.